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**Title:** LSC 2012 abstract – Systemic inflammation and vascular disorders in patients with combined flow of chronic obstructive pulmonary disease and arterial hypertension

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**Body:** Objective: To study systemic inflammation and vascular disorders in patients with combined flow and chronic obstructive pulmonary disease (COPD) and arterial hypertension (AH). Design and method: 92 patients with COPD and combined flow of COPD and AH were examined. The first group was formed by patients with combined flow of COPD and AH (n=51), the second was formed by patients with COPD (n=41). All patients underwent general clinical examination, biochemical analysis of blood, measurement of lipid fractions, levels of interleukin-6 (IL-6) and tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ), ultrasound examination of common right and left carotid artery. Results: Patients with COPD and AH had higher levels of plasma IL-6 (5.3 pg/ml; CI 95%, 3.51–8.14; p<0.02) and TNF- $\alpha$  (2.4 pg/ml; CI 95%, 1.71–4.72; p<0.05) while comparing with COPD group - IL-6 (2.3 pg/ml; CI 95%, 0.98–3.64) and TNF- $\alpha$  (1.1 pg/ml; CI 95%, 0.51–1.92). The patients with combined flow has greater intimal-medial thickness (IMT) of right carotid artery (1.03 mm; CI 95%, 0.939 -1.134) than COPD group (0.78 mm; CI 95%, 0.681-0.881; p<0.02). The left carotid artery IMT was also greater in the COPD and AH group (1.06mm; CI 95%, 0.915-1.213), than COPD group (0.83 mm; CI 95%, 0.718-0.952; p<0.02) The detected changes were not accompanied by significant changes in total cholesterol, high and low-density lipoproteins and triglycerides between groups.